## AMENDMENTS TO THE SPECIFICATION

**Please amend the paragraph beginning at page 1, line 25, as follows:**

Estimating the amount of the information in each of the information media as a digital information amount, the information amount of characters (per character) is 1~2 bytes, ~~while~~ the information amount of voices of telephone quality is 64 Kbits per second, and the information amount of moving pictures of the current television receiving quality is 100 Mbits per second. Accordingly, in ~~the~~ information media such as the telephone and television, it is not practical that massive information in digital formats is operated as it is. For example, TV phones have already been put to practical use by ISDN (Integrated Service Digital Network) having the transmission rate of 64 kbps~1.5Mbps. However, video information which is obtained by TV cameras cannot be transmitted as digital data as it is by the ISDN.

**Please amend the paragraph beginning at page 2, line 15, as follows:**

Thus, ~~the~~ technology for compressing information is required. For example, in the case of TV phones, the moving picture compression technology according to H.261 and H.263 standards which are internationally standardized by ITU-T (International Telecommunication Union-Telecommunication Sector) is employed. In addition, according to the information compression technology of MPEG-1 standard, image information can be stored in normal music CDs (Compact Disks) together with voice information.

**Please amend the paragraph beginning at page 2, line 24, as follows:**

Here, MPEG (Moving Picture Experts Group) is the international standard relating to the processing for compressing moving picture data. MPEG-1 is the standard for compressing

moving picture data in up to 1.5Mbps, i.e., compressing information of television signals by ~~to~~ about one hundredth. Further, the transmission rate for MPEG-1 standard is principally restricted to about 1.5Mbps. The moving picture data are compressed into 2~15Mbps according to MPEG-2 which is standardized to meet requirements of ~~further~~ higher image quality.

**Please amend the paragraph beginning at page 3, line 9, as follows:**

Further, in the present circumstances, ~~MEPG-4~~ MPEG-4 which enables coding of image data and operation of image data in object units, and realizes new functions required in the age of multimedia is now being standardized by a working group (ISO/IEC JTC1/SC29/WG11) that has promoted the standardization of the compression processing for moving picture data, like MPEG-1 and MPEG-2. In MPEG-4, the standardization of the coding processing at a lower bit rate has been aimed at first, but at the present time the targets of the standardization are extended to general-purpose coding processing for interlaced images at a higher bit rate.

**Please amend the paragraph beginning at page 3, line 21, as follows:**

One of characteristics of MPEG-4 is a mechanism for simultaneously coding image data corresponding to plural image sequences (i.e., plural moving pictures) and transmitting them. This mechanism makes it possible ~~enables~~ to construct one scene by composing plural images. The image in this case is an image (still picture) of each frame of the image sequence (moving picture). One scene is a composed image including plural images.

**Please amend the paragraph beginning at page 4, line 4, as follows:**

For example, in MPEG-4 ~~MEPG-4~~, it is possible that the foreground and background constituting one scene are separated as images (objects) of different image sequences and that the frame frequency, image quality and bit rate are changed independently for each of the image sequences. In addition, in MPEG-4, the images of the plural image sequences are arranged in the horizontal or vertical direction, like multi-screens, whereby users can extract or enlarge to display only images of desired image sequences.

**Please amend the paragraph beginning at page 5, line 6, as follows:**

~~Figure 8 is a diagram~~ Figures 8(a) to 8(c) are diagrams for schematically explaining coding processing in object units according to MPEG-4.

**Please amend the paragraph beginning at page 5, line 14, as follows:**

In the coding processing in object units, it is necessary ~~required~~ to decide the shape of the object and the position of the object with respect to a reference coordinate system for displaying the image. Thus, a rectangular region (bounding box) Box (figure 8(c)) is composed of plural macroblocks, involving the object Ob, is decided by the reference coordinate system. Here, the macroblock is an image space as a unit of the coding processing, and composed of 16X16 pixels. In addition, since the rectangular region Box is composed of the plural macroblocks, the number of pixels in the horizontal and vertical directions in the rectangular region is a ~~the~~ multiple of 16.

**Please amend the paragraph beginning at page 6, line 16 as follows:**

~~Figure 9 is a diagram~~ Figures 9(a) to 9(e) are diagrams for schematically explaining various processing units in a bitstream which conforms to MPEG-4.

**Please amend the paragraph beginning at page 12, line 23, as follows:**

As the stream error, there is an ~~are a~~ error that a code which is grammatically incorrect is included in a stream (syntax error) or an error that a code of an incorrect value which exceeds a ~~an~~ range of available values is included (semantic error) and the like. The transmission error is an error in which the bitstream is destroyed when the bitstream is read from a recording medium or the bitstream is transmitted via a communication medium due to the missing of data or the like.

**Please amend the paragraph beginning at page 13, line 7, as follows:**

Usually, the coded image data corresponding to each VOP are stored in a transmission packet having header information, and transmitted as the VOP bitstream in transmission packet units. Therefore, when the transmission error such as the absence ~~missing~~ of packets occurs, the position of a missing transmission packet in the bitstream can be detected on the receiving end. Accordingly, as for the transmission error, the position where the decoding processing fails in the bitstream (error occurrence position) can be almost specified.

**Please amend the paragraph beginning at page 13, line 17, as follows:**

As a concrete method for specifying the error occurrence position in the decoding processing, there is a method of detecting the absence ~~missing~~ of packets in the bitstream and

adding a mark which indicates the absence ~~missing~~ of the packet (marker code) to the position of the missing packet in the bitstream.

**Please amend the paragraph beginning at page 14, line 24, as follows:**

This moving picture decoding apparatus 100 receives a bitstream read from a recording medium or a bitstream transmitted via a transmission medium as an input stream Bin and performs decoding processing for the input stream Vin. Here, the bitstream includes image coded data which are obtained by subjecting an image signal of a moving picture to coding processing separately for each of plural image sequences constituting the moving picture. In addition, the coding processing for the image signal of one of the image sequences is performed for each scene (VOP) of the image sequence and ~~as well as~~ the image signal corresponding to each VOP is coded in units of macroblocks constituting the VOP. It goes without saying that the image signal of the object having no shape includes only the brightness signal and the color difference signal, and the image signal of the object having the shape includes the shape signal together with the brightness signal and the color difference signal.

**Please amend the paragraph beginning at page 26, line 5, as follows:**

Therefore, conventionally, the moving picture decoding apparatus which conceals the decoded image in macroblock units as shown in figure 12 and the moving picture decoding apparatus which conceals the decoded image in video packet units as shown in figure 13 are used properly according to their ~~the~~ purposes.

**Please amend the paragraph beginning at page 26, line 11, as follows:**

Further, both of the above-mentioned conventional moving picture decoding apparatuses have the structures in which the concealment processing for the decoded image is performed without distinction between the case where the input stream has the shape information and the case where the input stream has no shape information. Therefore, in the case where the input stream has the shape information, a ~~the~~ good image quality is not obtained even when the concealment of the image is performed.

**Please amend the paragraph beginning at page 27, line 6, as follows:**

It is an object of the present invention to provide a moving picture decoding method and a moving picture decoding apparatus, which can effectively improve ~~effectively~~ image quality deteriorated due to ~~the~~ transmission errors or stream errors in decoded images which are obtained by the decoding processing for input streams by concealment processing for the decoded images, and a recording medium which contains a moving picture decoding program for implementing the moving picture decoding method by software.

**Please amend the paragraph beginning at page 38, line 2, as follows:**

Figures 7(a) – 7(c) are diagrams ~~diagram~~ for explaining the case where the moving picture decoding processing according to any of the embodiments is implemented using a floppy disk which contains a moving picture decoding program by a computer system, figures 7(a) and 7(b) illustrating the floppy disk and figure 7(c) illustrating the computer system.

**Please amend the paragraph beginning at page 43, line 5, as follows:**

The transmission error detector 3 detects the transmission error on the basis of a marker code indicating the absence ~~missing~~ of the packet in the input stream Vin, like the error detector 120 in the conventional moving picture decoding apparatus 100. The marker code is inserted into the input stream by an error check unit 14 ~~(not shown)~~ which is provided in the previous stage of the moving picture decoding apparatus 100a. ~~This~~ The error check unit 14 specifies the position of a defect caused by the transmission error in the input stream on the basis of the analog signal level of the input stream or error-correcting codes, and inserts the marker code in this defective position.

**Please amend the paragraph beginning at page 62, line 19, as follows:**

Then, the control for switching the MB selector switch 5 is performed by the macroblock unit concealer 4 and the control for switching the VP selector switch 8 is performed by the video packet unit concealer 6. In the OR ~~OP~~ circuit 9, the error notification signal TSerr indicating that the input stream includes one of the transmission error or stream error is output to the AND circuit 11 according to the OR operation of the transmission error notification signal Terr and the stream error notification signal Serr.

**Please amend the paragraph beginning at page 65, line 21, as follows:**

In the first and second embodiments, the transmission error detector 3 detects the transmission error by detecting a mark (marker code) inserted in the bitstream, which indicates the absence ~~missing~~ of the packet. However, the transmission error detector can have a structure for obtaining information relating to the transmission error occurrence position in the input

stream from the transmission system in another way and outputting the transmission error notification signal Terr.